



Crop Residue Management

Leaving last year's crop residue on the soil surface by limiting tillage. Includes no-till, strip-till, mulch-till and ridge till.

How it works

Leaving last year's crop residue on the surface before and during planting operations provides cover for the soil at a critical time of the year. The residue is left on the surface by reducing tillage operations and turning the soil less. Pieces of crop residue shield soil particles from rain and wind until plants can produce a protective canopy.

How it helps

- Ground cover prevents soil erosion and protects water quality
- Residue improves soil tilth and adds organic matter to the soil as it decomposes
- Fewer trips and less tillage reduces soil compaction
- Time, energy and labor savings are possible with fewer tillage trips
- This could equate to greater profits

Planning ahead

- Will your crop produce enough residue?
- Is crop residue management part of a planned system of conservation measures?
- Do you have the needed equipment?

Tech notes

- Planning for residue cover begins at harvest. Ensure the combine spreads ample residues evenly over the field.
- Reduce the number of unnecessary tillage passes. Every tillage pass buries more crop residue.
- Use straight points and sweeps on chisel plows instead of twisted points.
- Twisted points can bury 20% more residue.
- Set tillage tools to work at shallower levels.
- Reduce speed of operation.
- Know the weeds that are present in your field. Control weed growth before planting with appropriate herbicides.

Measuring crop residues

You can estimate residue levels by using a line or rope that has 50 or 100 equally divided marks. Stretch the line diagonally across crop rows. Walk the entire length of the rope. Looking straight down, count the number of marks that have residue under the leading edge when looking from directly above the mark. Do not count residue smaller than 1/8 inch in diameter. If the line has 100 marks, the total number of marks with residue under them is the percent residue cover. If the line has only 50 marks, multiply your count by two. Repeat this three to five times in a representative area of the field. Average these percentages together to get the estimated residue amount in the field. Residue is always measured after planting the crop and before the first cultivation has occurred.